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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,429	02/14/2006	Makoto Tsuji	125559	9738
25944 7590 01/29/2011 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER DUONG, THANH P				
ART UNIT 1774		PAPER NUMBER		
NOTIFICATION DATE 01/20/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
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Office Action Summary

Application No.

10/568,429

Applicant(s)

TSUJI ET AL.

Examiner

TOM P. DUONG

Art Unit

1774

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 04 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3,4 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's remarks and amendments filed on October 4, 2010 have been carefully considered. Claims 1 and 3 have been amended. New claims 5 and 6 have been added. Claims 1-6 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Publication Number 09-276708 (hereinafter JPN '708) in view of Hoyer (3,959,520).

JPN '708 discloses a catalyst-support substrate (Figs. 1a, 1b) composed of a heat resistant porous structure (section 0007) having chained pores (section 0012); and a catalytic layer for burning particulates (sections 0012-0014), the catalytic layer formed on a surface of the catalyst-support substrate (section 0018).

JPN '708 does not expressly disclose "the filter catalyst being characterized in that an SEM photograph on a cross section of the filter catalyst is turned into electronic data so that, in an image being turned into electronic data, a ratio of a number of pixels forming an outer periphery of the catalytic layer to a number of pixels forming the catalytic layer is 0.5 or more and an image of 1 to 3 $\mu\text{m}/\text{pixel}$ magnification"; however,

JPN '708 discloses the device of the claimed invention and it would have been a *prima facie* obviousness that device of JPN '708 has the image with ratio of pixels of the claimed invention since the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. Furthermore, the ratio of a number of pixels forming an outer periphery of the catalytic layer to a number of pixels forming the catalytic forming the catalytic layer is 0.5 or more is not considered to confer patentability to the claim. The precise ratio of a number of pixels would have been considered a result effective variable by one having ordinary skill in the art. As such, without more, the claimed ratio of a number of pixels cannot be considered be "critical". Accordingly, one having ordinary skill in the art would have routinely optimized the ratio of a number of pixels for the filter catalyst so as to optimize the pressure drop and catalytic activity in the filter catalyst. (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)) and (*In re Aller*, 105 USPQ 233).

It appears that JPN '708 discloses the forming of the catalyst layer by removing excess slurry by repeating a pressure fluctuation at both ends of the catalyst-support substrate (sections 0012-0016 and 0024).

In any event, Hoyer et al. teaches that it is conventional to remove the excess catalyst slurry from the honeycomb surface by blowing pressurized air thru the surface (Col. 1, lines 15-29 and Col. 3, lines 1-30) in order to provide and control the proper amount of catalyst on the honeycomb surface (Col. 4, lines 9-36).

Thus, it would have been obvious in view of Hoyer et al. to one having ordinary skill in the art to modify the device of JPN '708 with the forming catalytic layer technique as taught by Hoyer et al. in order to provide and/or control the proper amount of the catalyst on the honeycomb surface.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the applied references [Japanese Publication Number 09-276708 (hereinafter JPN '708) in view of Hoyer (3,959,520)] as applied to claim 1 above, and further in view of Abe et al. (5,459,119).

Regarding claim 5, the applied references essentially disclose the features of the claimed invention except a catalyst layer with loading amount of 150 – 200 g/L apparent volume of the catalyst-support substrate.

Abe et al. teaches that it is conventional to provide the catalyst loading amount of the claimed invention in order to provide a catalyst purification device with excellent purification ability and durability (Col. 2, lines 27-55 and Tables I and II).

Thus, it would have been obvious in view of Abe et al. to one having ordinary skill in the art to modify the device of the applied references with the catalyst loading amount as taught by Abe et al. in order to provide a catalytic filter with excellent purification ability.

Response to Arguments

Applicant's arguments with respect to claims 1-2 and 5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOM P. DUONG whose telephone number is (571)272-2794. The examiner can normally be reached on 8:00AM - 4:30PM (IFP).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tom P. Duong/
Primary Examiner, Art Unit 1774